

Attorney Docket No. S-2498/DIV
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:) Group Art Unit: Unknown
)
KASUGA; SHIRAI SHI) Examiner: Unknown
)
Serial No. Divisional of)
parent appln. S.N. 10/100,991)
)
Filed: Concurrently herewith)

For: **CATALYST FOR PREPARATION OF UNSATURATED ALDEHYDE
AND UNSATURATED CARBOXYLIC ACID**

Appendix B

Please amend the claims as indicated according to the revision to 37 C.F.R. §1.121 concerning a manner for making claim amendments.

Claims 1-6 (Canceled)

7. (New) A process for catalytic vapor phase oxidation of isobutylene, tertiary butanol or propylene using molecular oxygen to produce, respectively, corresponding methacrolein and methacrylic acid or acrolein and acrylic acid, the process characterized by using the catalyst characterized in that it is in the form of ring-shaped bodies composed of a catalyst composition containing at least molybdenum and bismuth as the active ingredients and inorganic fibers in which the inorganic

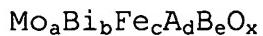
fibers are at least one selected from glass fibers, alumina fibers, silica fibers and carbon fibers, and have an average fiber length of from 50 μ m to 1.5mm and an average fiber diameter of from 2 μ m to 20 μ m.

8. (New) The process of claim 7, wherein the catalyst comprises inorganic fibers selected from glass fibers, alumina fibers, silica fibers and carbon fibers having an average fiber length of from 50 μ m to 1.5mm and an average fiber diameter of from 2 μ m to 20 μ m.

9. (New) The process of claim 8, wherein the catalyst contains from 0.01 to 30% by weight, based on the weight of the catalyst, of inorganic fibers.

10. (New) The process of claim 9, wherein the ring-shaped body has an outer diameter of 3-10mm, an inner diameter that is 0.1-0.7 times the outer diameter, and a length that is 0.5-2 times the outer diameter.

11. (New) The process of claim 10, wherein the catalyst composition is expressed by the general formula



wherein Mo is molybdenum; Bi is bismuth; Fe is iron; A is at least one element selected from nickel and cobalt; B is at least one element selected from alkali metal elements, alkaline earth metal elements, thallium, phosphorus, tellurium, antimony, tin, cerium, lead, niobium, manganese, arsenic, zinc, silicon, aluminum, titanium, zirconium, and tungsten; O is oxygen; a, b, c, d, e and x stand for the respective atomic numbers of Mo, Bi, Fe, A, B and O, where a is 12, b is 0.1-10, c is 0.1-20, d is 2-20, e is 0-30 and x is a numerical value determined by the extent of oxidation of the other elements.